(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
15 April 2004 (15.04.2004)

PCT

(10) International Publication Number
WO 2004/031229 A2

(51) International Patent Classification[7]: C07K 14/435

(21) International Application Number: PCT/GB2003/004296

(22) International Filing Date: 3 October 2003 (03.10.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0223193.4 7 October 2002 (07.10.2002) GB
0306261.9 19 March 2003 (19.03.2003) GB

(71) Applicants *(for all designated States except US)*: **LUDWIG INSTITUTE FOR CANCER RESEARCH** [CH/CH]; Postfach, CH-8024 Zurich (CH). **GENOME RESEARCH LIMITED** [GB/GB]; The Wellcome Trust Sanger Institute, Hinxton, Cambridge CB10 1SA (GB). **UCL Cruciform Limited** [GB/GB]; Gower Street, London WC1E 6BT (GB).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **LU, Xin** [CN/GB]; Ludwig Institute for Cancer Research, Imperial College School of Medicine at St Mary's, Norfolk Place, London W2 1PG (GB). **KUWABARA, Patricia** [US/GB]; Genome Research Limited, The Wellcome Trust Sanger Institute, Hinxton, Cambridge CB10 1SA (GB). **SELWOOD, David** [GB/GB]; UCL Cruciform Limited, Gower Street, London WC1E 6BT (GB).

(74) Agent: **HARRISON GODDARD FOOTE**; 31 St. Saviourgate, York YO1 8NQ (GB).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *without international search report and to be republished upon receipt of that report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/031229 A2

(54) Title: POLYPEPTIDE

(57) Abstract: The invention relates to a polypeptide, or part thereof, which inhibits the apoptotic activity of the tumour suppressor protein p53 and including screening methods to identify agents which interfere with the activity of said polypeptide.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
15 April 2004 (15.04.2004)

PCT

(10) International Publication Number
WO 2004/031229 A3

(51) International Patent Classification[7]: C07K 14/47, A61K 38/16

(21) International Application Number: PCT/GB2003/004296

(22) International Filing Date: 3 October 2003 (03.10.2003)

(25) Filing Language: English

(26) Publication Language: English

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0223193.4 7 October 2002 (07.10.2002) GB
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(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,

[Continued on next page]

(54) Title: P53 BINDING POLYPEPTIDE

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   1 GCGGCCGCGT CGACCCGGCG TTCAGACGCG GGCAGCTACC GGCGCTCGCT GGGCTCCGCG
  61 GGGCCGTCGG GCACTTTGCC TCGCAGCTGG CAGCCCGTCA GCCGCATCCC CATGCCCCCC
 121 TCCAGCCCCC AGCCCCGCGG GGCCCCGCGC CAGCGTCCCA TCCCCCTCAG CATGATCTTC
 181 AAGCTGCAGA ACGCCTTCTG GGAGCACGGG GCCAGCCGCG CCATGCTCCC TGGGTCCCCC
 241 CTCTTCACCC GAGCACCCCC GCCTAAGCTG CAGCCCCAAC CACAACCACA GCCCCAGCCA
 301 CAATCACAAC CACAGCCCCA GCTGCCCCAA CAGCCCCAGA CCCAACCCCA AACCCCTACC
 361 CCAGCCTCCC ACATCCGCAT CCCCAACAGA CATGGCCCCC TGTGAACGAA GGACCCCCCA
 421 AACCCCCCAC CGAGCTGGAG CCTGAGCCGG AGATAGAGGG GCTGCTGACA CCAGTGCTGG
 481 AGGCTGGCGA TGTGGATGAA GGACCCTGTA GCAAGGCCTC TCAGCCCCAC GAGGCTGCAG
 541 CCAGCACTGC CACCGGAGGC ACAGTCGGTG CCCGAGCTGG AGGAGGTGGC ACGGGTGTTG
 601 GCGGAAATTC CCCGGCCCCT CAAACGCAGG GGCTCCATGG AGCAGGCCCC TGCTGTGGCC
 661 CTGCCCCCTA CCCACAAGAA ACAGTACCAG CAGATCATCA GCCGCCTCTT CCATCGTCAT
 721 GGGGGGCCAG GGCCCGGGGG GCGGAGCCAG AGCTGTCCCC CATCACTGAG GGATCTGAGG
 781 CCAGGGCAGG GCCCCCTGCT CCTGCCCCAC CAGCTCCCAT TCCACCGCCC GGCCCCGTCC
 841 CAGAGCAGCC CACCAGAGCA GCCGCAGAGC ATGGAGATGC GCTCTGTGCT GCGGAAGGCG
 901 GGCTCCCCGC GCAAGGCCCG CCGCGCGCGC CTCAACCCTC TGGTGCTCCT CCTGGACGCG
 961 GCGCTGACCG GGGAGCTGGA GGTGGTGCAG CAGGCGGTGA AGGAGATGAA CGACCCGAGC
1021 CAGCCCAACG AGGAGGGCAT CACTGCCTTG CACAACGCCA TCTGCGGCGC CAACTACTCT
1081 ATCGTGGATT TCCTCATCAC CGCGGGTGCC AATGTCAACT CCCCCGACAG CCACGGCTGG
1141 ACACCCTTGC ACTGCGCGGC GTCGTGCAAC GACACAGTCA TCTGCATGGC GCTGGTGCAG
1201 CACGGCGCTG CAATCTTCGC CACCACGCTC AGCGACGGCG CCACCGCCTT CGAGAAGTGC
1261 GACCCTTACC GCGAGGGTTA TGCTGACTGC GCCACCTACC TGGCAGACGT CGAGCAGAGT
1321 ATGGGGCTGA TGAACAGCGG GGCAGTGTAC GCTCTCTGGG ACTACAGCGC CGAGTTCGGG
1381 GACGAGCTGT CCTTCCGCGA GGGCGAGTCG GTCACCGTGC TGCGGAGGGA CGGGCCGGAG
1441 GAGACCGACT GGTGGTGGGC CGCGCTGCAC GGCCAGGAGG GCTACGTGCC GCGGAACTAC
1501 TTCGGGCTGT TCCCCAGGGT GAAGCCTCAA AGGAGTAAAG TCTAGCAGGA TAGAAGGAGG
1561 TTTCTGAGGC TGACAGAAAC AAGCATTCCT GCCTTCCCTC CAGACCTCTC CCTCTGTTTT
1621 TTGCTGCCTT TATCTGCACC CCTCACCCTG CTGGTGGTGG TCCTTGCCAC CGGTTCTCTG
1681 TTCTCCTGGA AGTCCAGGGA AGAAGGAGGG CCCCAGCCTT AAATTTAGTA ATCTGCCTTA
1741 GCCTTGGGAG GTCTGGGAAG GGCTGGAAAT CACTGGGGAC AGGAAACCAC TTCCTTTTGC
1801 CAAATCAGAT CCCGTCCAAA GTGCCTCCCA TGCCTACCAC CATCATCACA TCCCCCAGCA
1861 AGCCAGCCAC CTGCCCAGCC GGGCCTGGGA TGGGCCACCA CACCACTGGA TATTCCTGGG
1921 AGTCACTGCT GACACCATCT CTCCCAGCAG TCTTGGGGTC TGGGTGGGAA ACATTGGTCT
1981 CTACCAGGAT CCCTGCCCCA CCTCTCCCCA ATTAAGTGCC TTCACACAGC ACTGGTTTAA
2041 TGTTTATAAA CAAAATAGAG AAACTGGTTT AATGTTTATA AACAAAATAG AGAAACTTTC
2101 GCTTATAAAT AAAAGTAGTT TGCACAGAAA TGAAAAAAAA AAAAAAAAAA AAAAAA
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(57) Abstract: The invention relates to a polypeptide, or part thereof, which inhibits the apoptotic activity of the tumour suppressor protein p53 and including screening methods to identify agents which interfere with the activity of said polypeptide.

WO 2004/031229 A3

SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
23 September 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB 03/04296

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C07K14/47 A61K38/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, BIOSIS, SEQUENCE SEARCH, WPI Data, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SAMUELS-LEV YARDENA ET AL: "ASPP proteins specifically stimulate the apoptotic function of p53" MOLECULAR CELL, CELL PRESS, CAMBRIDGE, MA, US, vol. 8, no. 4, October 2001 (2001-10), pages 781-794, XP002202189 ISSN: 1097-2765 the whole document --- -/--	1-54

[X] Further documents are listed in the continuation of box C.

[ ] Patent family members are listed in annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance

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Date of the actual completion of the international search	Date of mailing of the international search report
22 June 2004	30/07/2004

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Young, C

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	NAUMOVSKI L & CLEARY M L: "The p53-binding protein 53BP2 also interacts with Bcl2 and impedes cell cycle progression at G2/M" MOLECULAR BIOLOGY OF THE CELL, BETHESDA, MD, US, vol. 16, no. 7, 1 July 1996 (1996-07-01), pages 3884-3892, XP002095578 ISSN: 1059-1524 the whole document	1-54
X	IWABUCHI KUNIYOSHI ET AL: "Stimulation of p53-mediated transcriptional activation by the p53-binding proteins, 53BP1 and 53BP2" JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, BALTIMORE, MD, US, vol. 273, no. 40, 2 October 1998 (1998-10-02), pages 26061-26068, XP002189291 ISSN: 0021-9258 the whole document	1-54
X	TAKADA NORIO ET AL: "RelA-associated inhibitor blocks transcription of human immunodeficiency virus type 1 by inhibiting NF-kappaB and Sp1 actions" JOURNAL OF VIROLOGY, vol. 76, no. 16, August 2002 (2002-08), pages 8019-8030, XP002285486 ISSN: 0022-538X the whole document	1-54
P,X	BERGAMASCHI DANIELE ET AL: "iASPP oncoprotein is a key inhibitor of p53 conserved from worm to human." NATURE GENETICS , vol. 33, no. 2, February 2003 (2003-02), pages 162-167, XP001180301 ISSN: 1061-4036 (ISSN print) the whole document	1-54
T	SLEE ELIZABETH A ET AL: "The ASPP family: Deciding between life and death after DNA damage." TOXICOLOGY LETTERS (SHANNON), vol. 139, no. 2-3, 4 April 2003 (2003-04-04), pages 81-87, XP002285487 ISSN: 0378-4274	1-54

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
T	DATABASE NCBI 'Online! human RelA associated inhibitor, 20 December 2003 (2003-12-20) TAKANA: "human RelA associated inhibitor blocks transcription of HIV" retrieved from EBI Database accession no. NP_006654 XP002285488 abstract --- DATABASE NCBI 'Online! 21 November 2003 (2003-11-21) BERGAMASCHI: "iASPP oncoprotein is a key inhibitor of p53" retrieved from EBI Database accession no. NP_505955 XP002285489 abstract -----	1-54 1-54